09/502,534

1/39/4

DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat

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#### 12950966

Basic Patent (No, Kind, Date): JP 6188294 A2 19940708 <No. of Patents: 005> Patent Family:

Patent No Kind Date Applic No Kind Date JP 6188294 A2 19940708 JP 93124458 19930526 Α (BASIC) JP 8068772 A2 19960312 JP 95126723 Α 19950525 19950111 US 5578821 Α 19961126 US 371458 Α Α US 5665968 Α 19970909 US 607191 19960226 A 19960226 US 5717204 Α 19980210 US 606854

Priority Data (No, Kind, Date):

US 889460 A 19920527

US 252763 A 19940602

US 371458 A 19950111

US 889460 B1 19920527

US 607191 A 19960226

US 252763 B1 19940602 US 889460 B2 19920527

US 606854 A 19960226

#### PATENT FAMILY:

JAPAN (JP)

Patent (No, Kind, Date): JP 6188294 A2 19940708

EQUIPMENT AND METHOD OF AUTOMATIC SUBSTRATE INSPECTION USING CHARGED PARTICLE BEAM (English)

Patent Assignee: KLA INSTR CORP

Author (Inventor): DAN MAISUBAAGAA; ARAN DEII BUROODEII; ANIRU EE DESAI; DENISU JII EMUGE; TSUON UEI CHIEN; RICHIYAADO SHIMONZU; DEEBU II EE SUMISU; EIPURIRU DATSUTA; JIEI KAAKUUTSUDO EICHI RAFU; RESURII EE HONFUI; HENRII PIASU PAASHI; JIYON MAKUMAATORII; ERITSUKU MANROO

Priority (No, Kind, Date): US 889460 A 19920527 Applic (No, Kind, Date): JP 93124458 A 19930526

IPC: \* H01L-021/66; G01R-031/302

Derwent WPI Acc No: \* G 95-001507; G 95-001507

Language of Document: Japanese

Patent (No, Kind, Date): JP 8068772 A2 19960312

APPARATUS AND METHOD FOR AUTOMATIC MASK INSPECTION BY USING ELECTRON BEAM MICROSCOPY (English)

Patent Assignee: KLA INSTR CORP

Author (Inventor): DAN MAISUBAAGAA; ARAN DEII BUROODEII; TSUON UEI CHIEN; JIYATSUKU WAI JIYOO; BURAIAN JIEI GURENON

Priority (No, Kind, Date): US 252763 A 19940602

Applic (No, Kind, Date): JP 95126723 A 19950525

IPC: \* G01N-023/225; G01M-011/00; G01N-023/203; G21K-005/04;
H01J-037/28; H01L-021/66

Derwent WPI Acc No: \* C 96-197514; C 96-197514

Language of Document: Japanese

#### UNITED STATES OF AMERICA (US)

Patent (No, Kind, Date): US 5578821 A 19961126

ELECTRON BEAM INSPECTION SYSTEM AND METHOD Electron beam inspection system and method (English)

Patent Assignee: KLA INSTR CORP (US)

Author (Inventor): MEISBERGER DAN (US); BRODIE ALAN D (US); DESAI ANIL A (US); EMGE DENNIS G (US); CHEN ZHONG-WEI (US); SIMMONS RICHARD (US); SMITH DAVE E A (US); DUTTA APRIL (US); ROUGH J KIRKWOOD H (US); HONFI LESLIE A (US); PEARCE-PERCY HENRY (US);

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MCMURTRY JOHN (US); MUNRO ERIC (GB)
    Priority (No, Kind, Date): US 371458 A 19950111; US 889460 B1
      19920527
    Applic (No, Kind, Date): US 371458 A 19950111
    National Class: * 250310000; 250311000; 250396000R; 250396000ML;
      250397000
    IPC: * H01J-037/00
    Derwent WPI Acc No: * G 95-001507
    Language of Document: English
  Patent (No, Kind, Date): US 5665968 A
                                        19970909
    INSPECTING OPTICAL MASKS WITH ELECTRON BEAM MICROSCOPY (English)
    Patent Assignee: KLA INSTR CORP (US)
    Author (Inventor): MEISBURGER DAN (US); BRODIE ALAN D (US); CHEN
      ZHONG-WEI (US); JAU JACK Y (US); GRENON BRIAN J (US)
    Priority (No, Kind, Date): US 607191 A
                                            19960226; US 252763 B1
      19940602; US 889460 B2 19920527
    Applic (No, Kind, Date): US 607191 A
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    National Class: * 250310000; 250306000; 250307000
    IPC: * H01J-037/26
    Derwent WPI Acc No: * C 96-197514; G 95-001507
    Language of Document: English
  Patent (No, Kind, Date): US 5717204 A 19980210
    INSPECTING OPTICAL MASKS WITH ELECTRON BEAM MICROSCOPY (English)
    Patent Assignee: KLA INSTR CORP (US)
    Author (Inventor): MEISBURGER DAN (US); BRODIE ALAN D (US); CHEN
      ZHONG-WEI (US); JAU JACK Y (US)
    Priority (No, Kind, Date): US 606854 A
                                           19960226; US 252763 B1
      19940602; US 889460 B2 19920527
    Applic (No, Kind, Date): US 606854 A
                                         19960226
    National Class: * 250310000; 250306000; 250307000; 250397000
    IPC: * H01J-037/26
    Derwent WPI Acc No: * C 96-197514; G 95-001507
    Language of Document: English
UNITED STATES OF AMERICA (US)
 Legal Status (No, Type, Date, Code, Text):
                       19920527 US AA
                                               PRIORITY
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                             US 889460 Bl 19920527
                        19950111 US AE
   US 5578821
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                                              APPLICATION DATA (PATENT)
                              (APPL. DATA (PATENT))
                              US 371458 A 19950111
   US 5578821
                   Р
                        19950728 US AS02
                                              ASSIGNMENT OF ASSIGNOR'S
                              INTEREST
                              KLA INSTRUMENTS CORPORATION 160 RIO ROBLES
                              STREET SAN JOSE, CALIFORNIA 95161-905;
                             MEISBERGER, DAN: 19950526; BRODIE, ALAN D.: 19950607; DESAI, ANIL A.: 19950313; EMGE,
                              DENNIS G.: 19950327; CHEN, ZHO: 19950607;
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   US 5665968
                    р
                        19960226 US AE
                                              APPLICATION DATA (PATENT)
                              (APPL. DATA (PATENT))
                              US 607191 A 19960226
   US 5665968
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US 5717204	P	19960226 US AE APPLICATION DATA (PATENT)			
(APPL. DATA (PATENT))					
		US 606854 A 19960226			
US 5717204	P	19980210 US A PATENT			
US 5717204	P	20000502 US RF REISSUE APPLICATION FILED			
		(REISSUE APPL. FILED)			
		20000210			
US 5717204	P	20000801 US RF REISSUE APPLICATION FILED			
		(REISSUE APPL. FILED)			
		20000210			

Source: All Sources: Area of Law - By Topic: Patent Law: Patents: U.S. Patents: Utility Patents

Terms: patno is 5717204 (Edit Search)

Pat. No. 5717204, \*

#### 5,717,204

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Feb. 10, 1998

Inspecting optical masks with electron beam microscopy

**REISSUE:** Reissue Application filed Feb. 10, 2000 (O.G. Aug. 1, 2000) Ex. Gp.: 2878; Re. S.N. 09/502,534

Reissue Application filed Feb. 10, 2000 (O.G. May 2, 2000) Ex. Gp.: 2878; Re. S.N. 09/502,120

INVENTOR: Meisburger, Dan, San Jose, California Brodie, Alan D., Palo Alto, California Chen, Zhong-Wei, San Jose, California Jau, Jack Y., Fremont, California

ASSIGNEE-AT-ISSUE: KLA Instruments Corporation, San Jose, California (02)

**APPL-NO:** 606,854

FILED: Feb. 26, 1996

#### **REL-US-DATA:**

Continuation of Ser. No. 252,763, Jun. 2, 1994 now abandoned Which is a continuation-in-part of Ser. No. 889,460, May 27, 1992 now abandoned

**INT-CL:** [6] H01J 37#26

**US-CL**: 250#310; 250#306; 250#307; 250#397

**CL:** 250

**SEARCH-FLD:** 250#310, 306, 307, 492.1, 397

**REF-CITED:** 

#### U.S. PATENT DOCUMENTS

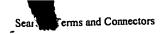
5,502,306 3/1996 \* Meisburger et al. 250#310 5,578,821 11/1996 \* Meisburger et al. 250#310

PRIM-EXMR: Nguyen, Kiet T.

LEGAL-REP: Jones; Aliston L.

**CORE TERMS:** electron, mask, substrate, secondary, beam, waveform, detector, inspection, backscatter, electron beam, computer, scan, optical, pixel, phase, quartz, deflection, die, chromium, region, column, lens, alignment, conductive, electrode, layer, energy, memory, processor, correspond

**ABST:** 





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Terms and Connectors	
5,717,204 or 5717204	Search
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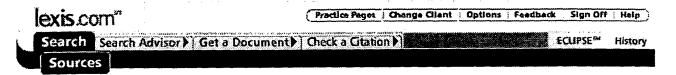
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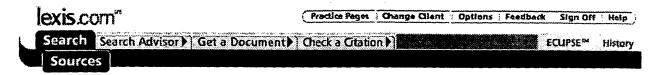
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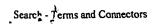
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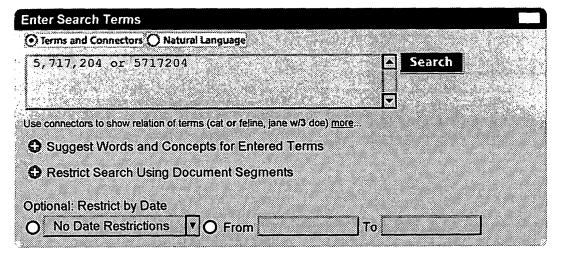
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## **Questel-Orbit:**

1/1 LGST - (C) LEGSTAT PN - US 5717204 [US5717204] AP - US 606854/96 19960226 [1996US-0606854] DT - US-P ACT - 19960226 US/AE-A APPLICATION DATA (PATENT) {US 606854/96 19960226 [1996US-0606854]} - 19980210 US/A **PATENT** - 20000502 US/RF REISSUE APPLICATION FILED 20000210 - 20000801 US/RF REISSUE APPLICATION FILED 20000210 UP - 2000-31

1/2 PAST - (C) PAST
AN - 200031-001329
PN - 5717204 A [US5717204]
DT - A (UTILITY)
OG - 2000-08-01
CO - REA
ACT - REISSUE APPLICATION FILED
SH - REISSUE APPLICATION FILED

1/1 CRXX - (C) CLAIMS/RRX
AN - 2940859
PN - 5,717,204 A 19980210 [US5717204]
PT - E (Electrical)
PA - Kla Instruments Corp
ACT - 20000210 REISSUE REQUESTED
Issue Date of O.G.: 20000502
Reissue Request Number: 09/502120
Examination Group responsible for Reissue process: 2878

- 20000210 REISSUE REQUESTED
Issue Date of O.G.: 20000801
Reissue Request Number: 09/502534
Examination Group responsible for Reissue process: 2878

UP - 2000-18 UACT- 2000-08-01